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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,900	01/03/2000	KOICHI FUNAYA	P/29-1206	8468

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EXAMINER

SALTARELLI, DOMINIC D

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/476,900

Applicant(s)

FUNAYA ET AL.

Examiner

Dominic D Saltarelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.  
4a) Of the above claim(s) 3-8, 10-16, 19-24 and 27-32 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 2, 9, 17, 18, 25 and 26 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 03 January 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3, 4, 6.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1, 2, 9, 17, 18, 25, and 26 in Paper No. 11 is acknowledged.
2. Claims 3-8, 10-16, 19-24 and 27-32 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 11.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "27" in Figure 7 has been used to designate both the 'Packet Detection' module and the 'Timing Adjustment FIFO' module. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
4. The drawings are objected to because the lower right legend in Figure 7 which reads "Output To Memory Butter" should be changed to --Output to Memory Buffer--. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections – 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki.

Regarding claim 25, Suzuki discloses a bitstream representing a result of filtering a plurality of carrying streams (col. 8, lines 42-43), wherein the filtered results are temporarily stored in a storing circuit (fig. 1, data stream storage section 107, col. 8, lines 47-48) constituted of a single memory space (fig. 1 data stream storage section 107, col. 8, lines 47-48) and thereafter generated (the bitstream filtered is being generated, or read out, by data stream storage section 107, col. 10, lines 10-13).

Regarding claim 26, Suzuki discloses the bitstream of claim 25, and further discloses the filtering and the storing of the filtered results in the storing circuit are performed in packets of the carrying streams (col. 8, lines 41-48).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 9, 17, and 18 are rejected under 35 U.S.C. 103(b) as being unpatentable over Suzuki et al. (5,864,358) [Suzuki] in view of Crosby et al. (5,933,192) [Crosby]

Regarding claims 1 and 17, Suzuki discloses a program filter and digital broadcast receiving method using a plurality of carrying streams (all the streams from a single transponder, col. 9, 49-55) output from a demodulating circuit (fig. 1, demodulation section 103, col. 8, lines 33-35, 38-40) to filter the carrying streams (fig. 1, transport stream separation section 105, col. 8, lines 42-43), and output filtered results (fig. 1, video and audio packets output from 107), wherein the filtered results are temporarily stored in a storing circuit configured by a single memory space (fig. 1 data stream storage section 107, col. 8, lines 47-48).

Suzuki also teaches switching physical channels [transponders] as fast as possible is desirable (col. 10, lines 53-63).

Suzuki fails to disclose utilizing more than one demodulation circuit.

In an analogous art, Crosby teaches a method of quickly changing physical channels (col. 7, lines 51-60) by utilizing more than one demodulation

circuit (fig. 1, modules 22 and 24, col. 3, lines 30-33), for the advantage of providing a new physical channel for immediate display (col. 7, lines 51-60).

It would have been obvious at the time to a person of ordinary skill in the art to modify the program filter and method disclosed by Suzuki to include multiple demodulating circuits, as taught by Crosby, for the advantage of providing a new physical channel for immediate display, as Suzuki discloses the desirability of fast channel switching.

Regarding claims 2 and 18, Suzuki and Crosby disclose the program filter and digital broadcast receiving method of claims 1 and 17, and further disclose the filtering processing and the storing processing of the filtered results in the storing circuit are performed in packets of the carrying streams (Suzuki, col. 8, lines 41-48).

Regarding claim 9, Suzuki discloses a digital broadcast receiving apparatus (fig. 1) comprising a demodulating circuit (fig. 1, demodulation section 103, col. 8, lines 33-35, 38-40), a program filter (fig. 1, transport stream separation section 105) for inputting a plurality of carrying streams output from the demodulating circuit (all the streams from a single transponder, col. 9, 49-55), filtering the carrying streams (col. 8, lines 42-43), and outputting filtered results (fig. 1, to storage sections 106 and 107), a memory buffer for storing outputs of

the program filter (fig. 1, storing sections 106 and 107), and a decoder (col. 17, lines 63-67), wherein

The program filter (105) is provided with a packet filter (filtering performed on packets, col. 8, lines 42-43) for receiving inputs from the demodulating circuit (103) and extracting only necessary information according to a designation of a user (col. 10, lines 18-44) out of the inputs and a memory interface circuit (fig. 1, control section 108, col. 9, lines 49-67) for writing outputs of the packet filter (105) in the memory buffer (106 and 107),

The packet filter (105) is provided with a judging circuit for comparing and judging whether a packet ID [elementary PID] of each packet of a carrying stream [transport stream] output from the demodulating circuit matches a previously entered packet ID and a controlling circuit for passing the packet whose packet ID matches the previously entered packet ID as a result of comparison (packets are extracted using elementary PIDs that are all common to the selected program\_number, col. 9 line 59 – col. 10 line 5), and

The memory interface circuit (108) writes a packet output from the packet filter (105) in the memory buffer (106 and 107) (filter 105 is under complete control of control section 108, col. 9, lines 49-61 and col. 10, lines 10-17, 31-44).

Suzuki also teaches switching physical channels [transponders] as fast as possible is desirable (col. 10, lines 53-63).

Suzuki fails to disclose utilizing more than one demodulation circuit.

In an analogous art, Crosby teaches a method of quickly changing physical channels (col. 7, lines 51-60) by utilizing more than one demodulation circuit (fig. 1, modules 22 and 24, col. 3, lines 30-33), for the advantage of providing a new physical channel for immediate display (col. 7, lines 51-60).

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Suzuki to include multiple demodulating circuits, as taught by Crosby, for the advantage of providing a new physical channel for immediate display, as Suzuki discloses the desirability of fast channel switching.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Post (5,822,572), who teaches filtering a plurality of information streams. Jong (6,269,107), who teaches filtering of packets in transport streams. Takai (6,651,250) who teaches a packet based program filter. Gurantz (5,936,660), who teaches using multiple demodulators to provide multiple channels of content to multiple viewers.

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually



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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D Saltarelli whose telephone number is (703) 305-8660. The examiner can normally be reached on M-F 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dominic Saltarelli  
Patent Examiner  
Art Unit 2611

DS

  
CHRIS GRANT  
PRIMARY EXAMINER